

Claims

We claim:

- 1 1. A method for using special comment language to augment
2 functionality of a program language architecture, the method
3 comprising the steps of:
 - 4 reading from a storage media, a program listing for
5 performing a basic function in a first executer;
 - 6 detecting in said program listing, a special comment
7 identifier by analyzing a standard comment statement in said
8 program listing;
 - 9 interpreting contents of said standard comment statement as
10 a special comment language statement when said special comment
11 identifier is detected in said standard comment statement; and,
12 performing said basic function and an optional function
13 according to said special comment language statement in a second
14 executer.
- "1 2. The method according to claim 1 wherein said special comment
2 identifier comprises a predetermined field left justified in a
3 standard comment format.
- "1 3. The method according to claim 1 wherein said special comment
2 identifier comprises a predetermined field right justified in a
3 standard comment format.
- 1 4. The method according to claim 1 wherein said special comment
2 identifier comprises a physical location in said program listing.
- 1 5. The method according to claim 1 wherein said special comment
2 language statement is context sensitive.

1 6. The method according to claim 1 wherein said function
2 comprises definition of a variable.

1 7. The method according to claim 1 wherein said function is
2 simulation environment criteria.

1 8. The method according to claim 1 wherein said function is
2 specification of type.

1 9. A method for assisting a user in editing a program wherein
2 said programming environment supports special comment language to
3 augment functionality of a program language architecture, the
4 method comprising the steps of:

5 analyzing in a program listing, a programming statement
6 entered by said user to determine if an optional special comment
7 language function exists for said programming statement;

8 determining if said optional special comment language
9 function should be added to said program listing; and,

10 adding said optional special comment to said program
11 listing.

12 10. The method according to claim 9 wherein said determining step
13 comprises the further step of displaying a representation of said
14 optional special comment language function to allow said user to
15 select a special comment indicating said special language
16 function to be added said program listing.

17 11. The method according to claim 10 wherein said displaying
18 step comprises a separate window concurrently displayed with a
19 previous window.

20 12. The method according to claim 10 comprising the further step
21 of selectively displaying a help assistant message for said

3 representation of said optional special comment language
4 function.

1 13. The method according to claim 10 wherein said representation
2 of said optional special comment language function comprises a
3 graphical image.

1 14. The method according to claim 9 further comprising the step
2 of highlighting a portion of said program listing wherein said
3 portion comprises said programming statement.

1 15. The method according to claim 9 wherein said analyzing step
2 further comprises analyzing the context of said programming
3 statement in relationship to said program listing.

1 16. The method according to claim 9 wherein said optional
2 special comment comprises a specification of type.

1 17. A system for using special comment language to augment
2 functionality of a program language architecture, the system
3 comprising:

4 means for reading from a storage media, a program listing
5 for performing a basic function in a first executer;

6 means for detecting in said program listing, a special
7 comment identifier by analyzing a standard comment statement in
8 said program listing;

9 means for interpreting contents of said standard comment
10 statement as a special comment language statement when said
11 special comment identifier is detected in said standard comment
12 statement; and,

13 means for performing said basic function and an optional
14 function according to said special comment language statement in
15 a second executer.

1 18. The system according to claim 17 wherein said special comment
2 identifier comprises a predetermined field left justified in a
3 standard comment format.

1 19. The system according to claim 17 wherein said special comment
2 identifier comprises a predetermined field right justified in a
3 standard comment format.

1 20. The system according to claim 17 wherein said special
2 comment identifier comprises a physical location in said program
3 listing.

1 21. The system according to claim 17 wherein said special
2 comment language statement is context sensitive.

1 22. The system according to claim 17 wherein said function
2 comprises definition of a variable.

1 23. The system according to claim 17 wherein said function is
2 simulation environment criteria.

1 24. The system according to claim 17 wherein said function is
2 specification of type.

1 25. A system for assisting a user in editing a program wherein
2 said programming environment supports special comment language to
3 augment functionality of a program language architecture, the
4 system comprising:

5 means for analyzing in a program listing, a programming
6 statement entered by said user to determine if an optional
7 special comment language function exists for said programming
8 statement;

9 means for determining if said optional special comment
10 language function should be added to said program listing; and,
11 means for adding said optional special comment to said
12 program listing.

1 26. The system according to claim 25 wherein said determining
2 means further comprises means for displaying a representation of
3 said optional special comment language function to allow said
4 user to select a special comment indicating said special
5 language function to be added said program listing.

1 27. The system according to claim 26 wherein said displaying
2 means comprises a separate window concurrently displayed with a
3 previous window.

1 28. The system according to claim 26 further comprising means
2 for selectively displaying a help assistant message for said
3 representation of said optional special comment language
function.

1 29. The system according to claim 26 wherein said representation
2 of said optional special comment language function comprises a
3 graphical image.

1 30. The system according to claim 25 further comprising means
2 for highlighting a portion of said program listing wherein said
3 portion comprises said programming statement.

1 31. The system according to claim 25 wherein said analyzing means
2 further comprises means for analyzing the context of said
3 programming statement in relationship to said program listing.

1 32. The system according to claim 25 wherein said optional
2 special comment comprises a specification of type.

1 33. A computer program product comprising a computer useable
2 medium having compute readable program code means therein in a
3 computing system for using special comment language to augment
4 functionality of a program language architecture, the computer
5 readable program code means in said computer program product
6 comprising:

7 computer readable program means for reading from a storage
8 media, a program listing for performing a basic function in a
9 first executer;

10 computer readable program means for detecting in said
11 program listing, a special comment identifier by analyzing a
12 standard comment statement in said program listing;

13 computer readable program means for interpreting contents of
14 said standard comment statement as a special comment language
15 statement when said special comment identifier is detected in
16 said standard comment statement; and,

17 computer readable program means for performing said basic
18 function and an optional function according to said special
19 comment language statement in a second executer.

1 34. The computer program product according to claim 33 wherein
2 said special comment identifier comprises a predetermined field
3 left justified in a standard comment format.

1 35. The computer program product according to claim 33 wherein
2 said special comment identifier comprises a predetermined field
3 right justified in a standard comment format.

1 36. The computer program product according to claim 33 wherein
2 said special comment identifier comprises a physical location in
3 said program listing.

1 37. The computer program product according to claim 33 wherein
2 said special comment language statement is context sensitive.

1 38. The computer program product according to claim 33 wherein
2 said function comprises definition of a variable.

1 39. The computer program product according to claim 33 wherein
2 said function is simulation environment criteria.

1 40. The computer program product according to claim 33 wherein
2 said function is specification of type.

1 41. A computer program product comprising a computer useable
2 medium having computer readable program code means therein in a
3 computing system for assisting a user in editing a program
4 wherein said programming environment supports special comment
5 language to augment functionality of a program language
6 architecture, the computer readable program code means in said
7 computer program product comprising:
8 computer readable program code means for analyzing in a
9 program listing, a programming statement entered by said user to
10 determine if an optional special comment language function exists
11 for said programming statement;

12 computer readable program code means for determining if said
13 optional special comment language function should be added to
14 said program listing; and,

15 computer readable program code means for adding said
16 optional special comment to said program listing.

1 42. The computer program product according to claim 41 wherein
2 said determining means further comprises means for displaying a
3 representation of said optional special comment language function
4 to allow said user to select a special comment indicating said
5 special language function to be added said program listing.

1 43. The computer program product according to claim 42 wherein
2 said displaying means comprises a separate window concurrently
3 displayed with a previous window.

1 44. The computer program product according to claim 42 further
2 comprising means for selectively displaying a help assistant
3 message for said representation of said optional special comment
4 language function.

1 45. The computer program product according to claim 42 wherein
2 said representation of said optional special comment language
3 function comprises a graphical image.

1 46. The computer program product according to claim 41 further
2 comprising means for highlighting a portion of said program
3 listing wherein said portion comprises said programming
4 statement.

1 47. The computer program product according to claim 41 wherein
2 said analyzing means further comprises means for analyzing the
3 context of said programming statement in relationship to said
4 program listing.

1 48. The computer program product according to claim 41 wherein
2 said optional special comment comprises a specification of type.

1 49. A system for performing a basic function according to
2 statements in a program listing and an optional function
3 according to special comments in the program listing wherein the
4 optional function is not required for performing the basic
5 function, the system comprising:
6 a storage media;
7 a computer processor, connected to said storage media;
8 a program listing stored in said storage media comprising
9 said program statements for performing said basic function and
10 said special comment for performing said optional function; and,
11 an executer program in said computer processor performing
12 said basic function and said optional function according to said
13 statements and special comment.